

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with J. Lloyd (Reg. No.: 35,589) on October 8, 2009.

The application has been amended as follows:

(a) in claim 1, lines 14-16.

the limitation "an anti-fuse formed on the second contact plug in a second via hole of the second insulating layer for electrical connection of a third contact plug to the second contact plug;" has been replaced by "an anti-fuse formed on the second contact plug in a second via hole of the second insulating layer;" i.e., the wording "for electrical connection of a third contact plug to the second contact plug" is omitted; and

(b) in claim 1, line 17, the limitation "the third contact plug filling the second via hole" has been replaced by "a third contact plug filling the second via hole", i.e., the particle "the" with which the limitation starts has been replaced by the particle "a".

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

- a. With regard to the ground of rejection under 35 U.S.C. 103(a) of claims 1-10 over Cloud et al (US 2002/0015322) in view of Lee et al (US 2001/0005604) and Noble et al (US 2002/0024083) as set forth in the most recent office action, examiner considers the argument of traverse as provided in remarks, page 3, as filed on 7/6/09 by applicant, persuasive because the combination still fails to arrive at the claimed invention. In particular, the references jointly fail to arrive at a structure comprising (a) the claimed second contact plug in the second insulating layer, (b) the anti-fuse formed in the second contact plug in a second via hole of the second insulating layer, and (c) a third contact plug filling the second via hole. Neither Lee nor Noble compensate for the failure of Cloud et al. A further modification is not obvious over the prior art.
- b. With regard to Fukuzumi, Y. (JP 2002-334928), arguments by applicant in traverse of a rejection under 35 U.S.C. 103(a) (see Office action mailed 6/25/08) overcome said rejection because as pointed out in Remarks filed 9/24/08 the full text of Fukuzumi as translated by the Translations Branch of the U.S. patent & trademark Office, region 11 is an isolation region (see paragraphs [0021] - [0025] as translated) and hence "gate electrode pattern" 13a does not produce a channel, while, conversely, the gate electrode 13 with source and drain regions 17/19 does not include a second contact plug contacting the top electrode with anti-fuse and third contact plug formed thereon. Therefore, a rejection based on Fukuzumi as originally set forth is persuasively traversed. It is, moreover not obvious how to arrive at the claimed invention based on Fukuzumi et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHANNES MONDT whose telephone number is (571)272-1919. The examiner can normally be reached on 8-17.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHANNES MONDT/
Primary Examiner, Art Unit 3663

October 10, 2009.